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Ivan V. Mendenhall

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09/29/2009

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EXAMINER

FELTON, AILEEN BAKER

ART UNIT

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1793

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 39-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02085817 to Kubo et al (reference will be made to English language equivalent US 20040159381)

Kubo et al discloses slurry mixing of oxidizer such as copper hydroxide and fuel such as 5-aminotetrazole and subsequently heated (para. 0012, 0028, 0055, and 0081). The mixture is then added to other components of gas generating compositions (para. 0095 and 0096).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the claimed compounds present in the composition since they will form upon reaction of two compounds that are combined in a slurry and heated and then added to the composition. It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the parameters of the gas generant composition to achieve a desired result. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in

the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

3. Claims 54-59, 61-66, and 69-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02085817 to Kubo et al as applied to claims 39-51 above, and further in view of Mendenhall et al (6143102).

Mendenhall teaches a gas generating composition that comprises BCN and GN (col. 4).

It is prima facie obvious to combine two compositions, each taught for the same purpose to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423.

Response to Arguments

4. Applicant's arguments have been fully considered but they are not persuasive. Applicant's declaration indicates that Kubo requires an excess of ammonium nitrate, this is not the case as a wide range of amounts of ammonium nitrate are disclosed and also Kubo does not require there to be an excess of ammonium nitrate, thus some of the copper hydroxide and 5-AT will react in the slurry process to form the claimed complex. Applicant has not provided any test results or evidence to support this allegation that the complex cannot be formed in Kubo.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AILEEN FELTON whose telephone number is (571)272-6875. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aileen Felton/
Primary Examiner
Art Unit 1793